

# MIKANIA BUCHTIENII (ASTERACEAE: EUPATORIEAE) NEW TO ARGENTINA

María M. Cerana

Facultad de Ciencias Agropecuarias  
Universidad Nacional de Córdoba  
Casilla de Correo 509  
5000 Córdoba, Argentina  
macerana@agro.uncor.edu

Luis Ariza-Espinar

Instituto Multidisciplinario de Biología Vegetal (IMBIV)  
CONICET - Universidad Nacional de Córdoba  
Casilla de Correo 495  
5000 Córdoba, Argentina  
arizaesp@imbiv.unc.edu.ar

## ABSTRACT

**Mikania buchtienii** B.L. Rob. (Asteraceae, Eupatorieae) is first reported as occurring in Argentina, where it has been collected in the Yungas region of the northwestern part of the country (Salta and Jujuy provinces). The species, which was known only from Bolivia, is described and illustrated and a key shows the differences between *M. buchtienii* and *M. euryanthes*, a closely related species.

## RESUMEN

**Mikania buchtienii** B.L. Rob. (Asteraceae, Eupatorieae) se cita por primera vez para Argentina, donde ha sido colectada en las Yungas de la región noroccidental del país (provincias de Salta y Jujuy). La especie, que vive en Bolivia, es descrita e ilustrada, y una clave muestra las diferencias entre *M. buchtienii* y *M. euryanthes*, una especie muy afín.

During an extensive taxonomic study of the genus *Mikania* in Argentina (Cerana 1997a, b), two specimens from the northwestern Argentina (Yungas region) came to our attention. After a literature review and comparison with similar species, we concluded that it was necessary to relocate and collect the species in its natural habitat in order to determine its identity. In July 1997, February and November 1998, three trips were made to Las Capillas in Jujuy Province to search for the species, but without success. In October 2000, field studies were conducted in San Pedrito, Salta Province, located about 45 km from Estación Vespucio. One flowering specimen, which also had fruits from the previous year, was collected. Other plants present were in the vegetative stage.

In addition to the field studies, specimens from the following herbaria were examined: BAB, CORD, CTES, JUA, LIL, LP, LPB, SI. Our research has shown that the collection and herbarium specimens represent the first records of *Mikania buchtienii* B.L. Rob. for Argentina. This is also the first known occurrence of the species from outside of Bolivia. A specimen was sent to W.C. Holmes of Baylor University in Waco, Texas, who confirmed our determination.

**Mikania buchtienii** B.L. Rob., Contr. Gray Herb. n. s. 64:7. 1922. (**Fig. 1**).  
Twining lianas; stems terete, striate, glabrate. Leaves simple, coriaceous, opposite, petiolate, inconspicuously stipulate; petioles 10–30 mm long; blades from

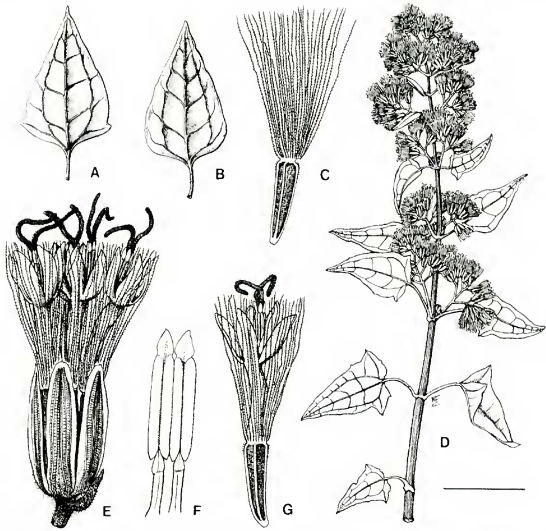


FIG. 1. *Mikania buchtienii* B.L. Rob. A. Leaf with deltate-hastate shape. B. Leaf with deltate-ovate shape. C. Achene. D. Flowering branch. E. Head. F. Stamens. G. Floret. (A, B: *Cerana* 1740, CORD; C-G: *Schulz* 5482, LIL). Scale bar = 30 mm (A, B, D), 3 mm (C, E, G), 1 mm (F).

deltate-hastate to deltate-ovate or ovate, 30–90 × 20–60 mm, margins entire to slightly serrate, bases subcordate to rounded, apices acute; upper surfaces glabrescent, lower surfaces glabrate or slightly pilose. Capitulescence paniculate to cylindrical, dense, branches terete, terminal or axillary disposed; heads ca. 10 mm long, peduncles pubescent; subinvolucral bracts lanceolate, abaxially pubescent, 2.5–3.5 × 0.7 mm, located at the base of the peduncle or beneath the head; phyllaries 5–6.7 × 1.2–1.8 mm, apex obtuse or rounded, the outer bracts oblong, lanceolate or oblanceolate, abaxially pubescent, the inner ones, lanceolate, glabrate, apex ciliate. Corolla white, 5–6.5 mm long, tube 2.8–3.5 mm long, limb widely campanulate to campanulate 2–3 mm long, divided into lanceolate corolla lobes extending almost to the base (2.3–2.6 mm long); style glabrous. Achenes 3.5–4 mm long, more densely pubescent apically, ribs serrulate;

pappus yellowish white with 45–60 barbellate bristles, 5.5–7 mm long.

*Phenology*.—Flowering specimens were collected from August to October, but it is assumed that flowering and fruiting occur from August to March.

*Habitat and distribution*.—The original description and previous additional reports of *M. buchtienii* have been based on specimens collected in upland forests, riverine woodlands and matorral areas in the Yungas region of Bolivia, at 1100–3500 m (Robinson 1922a, b). The new records extend the known range to the forests and borders of woods in the Yungas region of Salta and Jujuy, Argentina, at 1000–1200 m. This biogeographical province has a wet and humid climate with over 2500 mm of rain annually and temperatures between 14° and 26° C (Cabrera 1971).

Specimens examined. **ARGENTINA. Jujuy:** Capital, Las Capillas, 22 Sep 1981, *Ahumada y Rotman* 4321 (JUA, SI). **Salta:** General José de San Martín, San Pedrito (Pozos de la Standard), 25 Aug 1944, *Schulz* 5482 (LIL, BAB, CTES); General José de San Martín, San Pedrito, Empresa Panamericana Energía, a ± 200 m de la Histórica Escuela, 19 Oct 2000, *Cerana* 1740 (CORD, BAYLU).

**BOLIVIA. La Paz:** Nor Yungas, Yolosa hacia Chuspipata, pasando Sacramento Bajo y el derrumbe grande, antiguo (16° 16' S, 67° 47' W), 19 Sep 1995, *Beck* 22468 (LPB); Inquisivi, "Rio Churu", following the Rio Churu from 200 m W of Aguilam to 1 km above the main fork up river, 3 km SE of the ruins of Choquecamiri, 17 km N of Choquetanga (16° 42' S, 67° 20' W), 12 Sep 1991, *Lewis* 40208 (LPB); Inquisivi, "Aguas Calientes de Calachaca", in the area of the thermal springs of the Rio Calachaca Jahuira, 9 km NW of Choquetanga (16° 48' S, 67° 19' W), 9 Mar 1991, *Lewis* 38244 (LPB).

*Mikania buchtienii* is closely related to *Mikania euryantheta* (Malme) W.C. Holmes, which is widespread in Paraguay, southern Brazil (State of Parana) and the provinces of Corrientes, Chaco, Formosa and Misiones in Argentina (Barroso 1959; Holmes & McDaniel 1996; Cerana 1997a, b). Both species are similar in leaf blade shape, corolla shape and very long corolla lobes. The main differences between them are summarized in the following key:

#### KEY TO DISTINGUISH MIKANIA BUCHTIENII AND *M. EURYANTHETA*

1. Leaf blades membranaceous, deltate-ovate, bases subcordate to truncate, glabrate; capitulescence paniculate, scattered; subinvolutar bracts slightly pubescent, with a prominent middle nerve; corolla glabrate, limb 2–3 mm long divided into corolla lobes 1.5–1.7 mm long; achenes glabrous \_\_\_\_\_ ***Mikania euryantheta***
1. Leaf blades coriaceous, deltate-hastate, deltate-ovate, or ovate, bases subcordate or rounded, upper surfaces glabrescent, lower surfaces glabrate or slightly pilose; capitulescence paniculate to cylindrical, dense; subinvolutar bracts pubescent, with an inconspicuous middle nerve; corolla pubescent, limb 2–3 mm long divided into corolla lobes 2.3–2.6 mm long; achenes pubescent \_\_\_\_\_ ***Mikania buchtienii***

#### ACKNOWLEDGMENTS

We are grateful to curators of the herbaria BAB, CORD, CTES, JUA, LIL, LP, LPB, SI, and St. Beck, director of the herbaria LPB for their loan of specimens. We appreciate M. Nee (NY) for sending us digital images. We thank W.C. Holmes of Baylor University, Waco, Texas, for assistance in confirming the identity of our

plant. Guy Nesom and an anonymous reviewer offered helpful improvements. We thank managers of Panamerican Energy for providing access to the property and transportation while on-site. We thank A.P. de Pereyra (F.C.A., Universidad Nacional de Córdoba, Argentina) for assistance with the English version of the manuscript. Financial support for the research was provided by Agencia Córdoba Ciencia and Fondo para la Investigación Científica y Tecnológica (FONCyT). Thanks are also due to N. de Flury and L. Ribulgo for drawing the excellent illustration.

#### REFERENCES

- BARROSO, G.M. 1959. *Mikaniae* do Brasil. Arq. Jard. Bot. Rio de Janeiro 16:38–333.
- CABRERA, A.L. 1971. Fitogeografía de la República Argentina. Bol. Soc. Argent. Bot. 14:1–42.
- CERANA, M.M. 1997a. El género *Mikania* (Asteraceae) en la República Argentina. Aspectos taxonómicos y morfológicos. Tesis Doctoral. Facultad de Ciencias Exactas, Físicas y Naturales, Universidad Nacional de Córdoba, Argentina. Pp. 1–257.
- CERANA, M.M. 1997b. *Mikania*. In: A.T. Hunziker, ed., Tribu Eupatorieae, Fl. Fanerog. Argent. 47:54–76.
- HOLMES, W.C. and S. McDANIEL. 1996. *Mikania*. In: Spichiger y Ramella, eds., Flora del Paraguay 25:208–271.
- ROBINSON, B.L. 1922a. Records preliminary to a general treatment of the Eupatorieae, - I. Contr. Gray Herb. n.s. 64:1–21.
- ROBINSON, B.L. 1922b. The Mikanias of northern and western South America. Contr. Gray Herb. n.s. 64:21–116.